

CLAIMS

What is claimed is:

1. A method comprising:

selecting a dicing tape with an adhesive layer that has a thickness greater than a height of one or more bump electrodes of a wafer; and
applying the dicing tape to the wafer such that the adhesive layer conforms to the one or more bump electrodes.

2. The method of claim 1 wherein the wafer is a double bumped wafer.

3. The method of claim 2 wherein the dicing tape is applied using a mounting pressure roller wherein the adhesive layer helps to distribute a pressure applied by the mounting pressure roller.

4. The method of claim 3 wherein the dicing tape is a radiation sensitive tape.

5. The method of claim 4 wherein the bump electrodes have a height of approximately 60 microns and the adhesive layer has a thickness of approximately 130 microns.

6. The method of claim 5 further comprising:

mounting the wafer on a support member; and
dicing the wafer using a dual-blade dicing process.

7. The method of claim 6 further comprising:
irradiating a backside of the dicing tape to reduce an adhesive strength of the adhesive layer.
8. The method of claim 7 wherein the adhesive strength is reduced from a pre-radiation adhesive strength of approximately 200 grams/25 mm² to a post-radiation adhesive strength of approximately 2 grams/25 mm².
9. An assembly comprising:
a wafer having bump electrodes formed on at least one of two opposing surfaces; and
a dicing tape applied to one of the at least one surfaces, the dicing tape having an adhesive layer that is thicker than a height of the bump electrodes such that the adhesive layer conforms to the bump electrodes.
10. The assembly of claim 9 wherein the dicing tape is applied using a mounting pressure roller wherein the adhesive layer helps to distribute a pressure applied by the mounting pressure roller.
11. The assembly of claim 10 wherein the dicing tape is a radiation sensitive tape.

12. The assembly of claim 11 wherein the bump electrodes have a height of approximately 60 microns and the adhesive layer has a thickness of approximately 130 microns.

13. The assembly of claim 12 wherein an adhesive strength of the dicing tape is reduced from a pre-radiation adhesive strength of approximately 200 grams/25 mm² to a post-radiation adhesive strength of approximately 2 grams/25 mm².

14. A method comprising:

determining a height of one or more bump electrodes on a wafer surface; and
selecting a dicing tape based upon the determined height of the one or more bump electrodes.

15. The method of claim 14 wherein the wafer is a double bumped wafer.

16. The method of claim 15 wherein selecting the dicing tape based upon the determined height of the one or more bump electrodes includes selecting a dicing tape having an adhesive layer thicker than the determined height of the one or more bump electrodes

17. The method of claim 16 further comprising:

applying the dicing tape to the wafer such that the adhesive layer conforms to the one or more bump electrodes.

18. The method of claim 17 wherein the dicing tape is applied using a mounting pressure roller wherein the adhesive layer helps to distribute a pressure applied by the mounting pressure roller.

19. The method of claim 14 wherein the dicing tape is a radiation sensitive tape having a pre-radiation adhesive strength of approximately 200 grams/25 mm², and a post-radiation adhesive strength of approximately 2 grams/25 mm².

20. The method of claim 14 wherein the bump electrodes have a height of approximately 60 microns and the adhesive layer has a thickness of approximately 130 microns.

21. The method of claim 20 further comprising:
mounting the wafer on a support member; and
dicing the wafer using a dual-blade dicing process.

22. The method of claim 21 further comprising:
irradiating a backside of the dicing tape to reduce an adhesive strength of the adhesive layer.

23. A method comprising:
applying an adhesive to a wafer surface, the wafer surface having one or more bump electrodes formed thereon, the adhesive covering the one or more bump electrodes to form an adhesive layer; and

applying a backing film to the adhesive layer.

24. The method of claim 23 wherein the wafer is a double bumped wafer.
25. The method of claim 23 wherein the backing film is applied using a mounting pressure roller wherein the adhesive layer helps to distribute a pressure applied by the mounting pressure roller.
26. The method of claim 25 wherein the bump electrodes have a height of approximately 60 microns and the adhesive layer has a thickness of approximately 130 microns.
27. The method of claim 23 further comprising:
 - mounting the wafer on a support member; and
 - dicing the wafer using a dual-blade dicing process.